

REMARKS

The application has been amended and is believed to be in condition for allowance.

Claims 1, 4, and 7 are independent.

Applicant acknowledges with appreciation that claims 11-12, 14-15, and 17-18 are allowed if rewritten in independent form.

Applicant also acknowledges with appreciation that, apart from formal matters, claims 10, 13, and 16 are allowed if rewritten in independent form.

The claims have been amended responsive to the claim objections and the indefiniteness rejection.

Withdrawal of the claim objections and the indefiniteness rejection is solicited.

Claim 1 has been amended to clarify that an illuminance variable section for varying illuminance intensity output from the light module in accordance with a determined distance from the camera module to an object to be captured.

Claim 2 has been amended to clarify that the determined distance is based on a zoom ratio of the camera module.

Claim 3 has been amended, in accordance with Figure 2, to clarify that the illuminance variable section varies the illuminance intensity output for photography of the light module in accordance with information on the image processing of an immediately preceding taken image.

Claims 4-9 have been similarly amended.

As reviewed in the last amendment, the light section 13 (Figure 1) can emit light with arbitrary illuminance, i.e., intensity output. Figure 2 is a sequence chart showing the operation of each part of the portable terminal device. The zoom information is a control signal corresponding to an optical zoom value and a digital zoom value. The light illuminance (intensity output) is varied in accordance with a distance from the device to an object based on the zoom information. The light control section 12 carries out illuminance intensity output control on the light section 13 in accordance with the zoom value.

Additionally, the light control section 12 varies the illuminance intensity output in accordance with image processing data (a13 of Fig. 2; see also Figure 5). Here, varying the illuminance intensity output in accordance with image processing data further corrects the variation in the illuminance already made on the basis of the zoom value. Thus, as described above, the illuminance intensity output is varied in accordance with the zoom information, and then is further corrected in accordance with the image processing information, in order to carry out light control appropriate to the distance from the device to the object.

These approaches of the invention are not taught or suggested in the prior art.

Substantive Rejections

Claims 1-6 were rejected as anticipated by KONISHI 7,164,446.

Claims 7-9 were rejected as anticipated by SAKAMOTO 2003/0137597.

Claim 1 recites "an illuminance variable section for varying illuminance intensity output from the light module in accordance with a determined distance from the camera module to an object." Note the requirement the illuminance intensity is varied with distance.

Claim 4 recites a step of varying illuminance intensity output in accordance with a determined distance.

Claim 7 recites a program making a computer vary illuminance intensity output in accordance with a determined distance from the portable terminal device to an object.

Neither applied reference teaches these features.

Further, neither reference teaches an illuminance variable section that further varies the illuminance intensity output for photography of the light module in accordance with information on the image processing of an immediately preceding taken image.

KONISHI teaches a "distance measurement means for measuring the distance to the subject on the basis of the focusing position of the focus lens detected by the focus detecting circuit" (claim 1) and a "first judgment means for

judging whether or not the irradiation distance of a strobe which is obtained on the basis of the f-stop value of said zoom lens is shorter than the distance to the subject which is measured by said distance measurement means" (also claim 1).

KONISHI, however, does not teach varying the illuminance intensity output from the light module in accordance with a determined distance from the camera module to an object. Rather, if the photo to be taken is outside the range of the light module, KONISHI teaches to adjust the gain of the recorded signal, "an imaging signal is amplified [more] than usual" (abstract) via the amplification factor control means (claim 1). There is a teaching (column 6, lines 4-24) wherein when the object is within the range of the light module the duration of the flash (light module) so that a predetermined amount of reflected light is obtained.

The disclosure beginning at line 12 is: "Specifically, when the subject is positioned within a distance at which a predetermined amount of reflected light can be obtained from the subject (hereinafter referred to as an "irradiation distance (or illuminating or lighting distance)") by the strobe light irradiated from the strobe 26, the time period during which the switch 30 is turned on is adjusted such that the predetermined amount of reflected light is obtained. Accordingly, the strobe light irradiated from the strobe 26 is adjusted. As the distance

to the subject increases, the time period during which the switch 30 is turned on gradually increases."

Thus, although there is a teaching as to varying light duration, there is no teaching as to varying light intensity.

Further, as per claim 3, there is no teaching of claim 3. The illuminance variable section varies further the illuminance intensity output for photography of the light module in accordance with information on the image processing of an immediately preceding taken image.

Thus, the anticipation rejection over KONISHI should be withdrawn.

Claim 7 requires varying light illuminance intensity output from a portable terminal device in accordance with a determined distance to an object.

SAKAMOTO does not vary intensity based on a determined distance to an object.

As per paragraph [0028], the SAKAMOTO teaching is to determine two flash intensities based on the scene position mode and the brightness of the subject.

Then two images are taken, a first image at the first flash intensity and a second image at a second flash intensity. As per paragraph [0029], the subject distance is judged from the two images. Thereafter, the image correction unit 14 corrects one of the two previously taken images (paragraph [0030]).

The intensity of the flash is not varied based on a determined distance as required by claim 7.

Further, as per claim 8, SAKAMOTO does not i) determine the distance to the object; and ii) send the determined distance as distance information to an illuminance variable section in order that the illuminance intensity output from the camera light module is varied in accordance with the thus determined distance.

Paragraphs [0017], and [0043]-[0048] do not make this disclosure. Paragraph [0017] teaches a program. Paragraphs [0043]-[0048] teach a computer connected to a camera. There is, however, no teaching of determining the distance to the object, and then using the thus-determined distance as distance information in order to vary the illuminance intensity output from the camera light module.

Withdrawal of the rejection is therefore solicited.

Should either rejection not be withdrawn, it is respectfully requested that the reference passages/elements be specifically identified that are believed to disclose the recited features.

In view of the references not anticipating the claimed invention obvious, allowance of all the claims is respectfully solicited.

The present amendment is believed to be fully responsive to the Official Action. In view of the above

amendment and remarks, Applicant believes the pending application is in condition for allowance.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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